REMARKS

This Amendment, submitted in response to the final Office Action dated August 10, 2009, is believed to be fully responsive to each point of rejection raised therein. Accordingly, favorable reconsideration on the merits is respectfully requested.

Claims 1-6, 8-17, 19-22 and 24-37 are all the claims pending in the application.

I.   Claims Objections

Claim 2 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

The Examiner states that claim 2 includes the same claim language as a limitation in claim 1. Applicant has canceled claim 2 from the application. Therefore, the objection to claim 2 should now be withdrawn.

Claim 35 is objected to because claims 18 and 23 were canceled thereby rendering the claim dependent upon canceled claims. Applicant has amended claim 35 as indicated above. Therefore, the objection to claim 35 should now be withdrawn.

II.   Rejection of claims 1-3, 5, 6, 8, 10-17, 19, 21, 22, 24, 26-32, and 35-37 under 35 USC § 103

Claims 1-3, 5, 6, 8, 10-17, 19, 21, 22, 24, 26-32, and 35-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Piotrowski (US 2002/0188959) in view of Blackketter (US 6,415,438) and further in view of Eng (US 5, 963,557). Since claim 2 has been canceled, the rejection of claim 2 is now moot.

Claim 1

Claim 1 recites, *inter alia,*:

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        a reference clock generator/transmitter, which
generates and transmits a reference clock value, which is a
current time value of real-time multimedia broadcasting at
the transmission and reception locations;
        a multimedia document generator/transmitter, which
generates and transmits a multimedia document scheduled at
the generated reference clock value; and
        a media data generator/transmitter, which generates
and transmits media data used to render the generated
multimedia document;
        wherein the multimedia document is a synchronized
multimedia integration language (SMIL) document.
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The Examiner asserts that Piotrowski teaches the elements of claim 1. Applicant traverse this rejection.

Piotrowski teaches a system for displaying supplemental multimedia information to a user. A user can receive, automatically or by request, supplemental multimedia information related to a video or TV program using SMIL. See abstract. The supplemental multimedia information is edited and synchronized to the action and events of the video/multimedia program. This ensures that the supplemental multimedia information is available to the viewer at the proper times throughout the multimedia program. See paragraph [0025].

Piotrowski at most discloses providing supplemental multimedia information at a proper time. Contrary to the Examiner's assertions, there is no teaching or suggestion of a reference clock generator/transmitter or that such a reference clock generator/transmitter generates and transmits a reference clock value, which is a current time value of real-time multimedia broadcasting at the transmission and reception locations, as claimed.

Further, there is no teaching or suggestion of a multimedia document generator/transmitter, which generates and transmits a multimedia document <u>scheduled at the generated reference clock value</u>.

Piotrowski discloses providing supplemental multimedia information via a web page. The web page can be written using a language such as SMIL. However, Applicant submits that there is no teaching or suggestion of <u>a multimedia document generator/transmitter</u>. Piotrowski merely discloses that the multimedia information can be in SMIL. There is no teaching or suggestion regarding the generation of the SMIL.

Further, there is no teaching or suggestion that the multimedia document generator/transmitter generates and transmits the multimedia document scheduled <u>at the generated reference clock value.</u> Specifically, there is no teaching or suggestion regarding the relationship between the multimedia document and a generated reference clock value.   As discussed above, Piotrowski does not teach or suggest generating or transmitting a reference clock value, let alone generating and transmitting a multimedia document scheduled <u>at the generated reference clock value.</u>

Claim 1 further recites "a media data generator/transmitter, which generates and transmits media data used to render the generated multimedia document." The Examiner cites paragraphs [0024] and [0029-0038] of Piotrowski for teaching this aspect of the claim. However, the portion of Piotrowski cited by the Examiner describes the supplemental multimedia information, which the Examiner cited for teaching the claimed multimedia document generator/transmitter. Piotrowski does not appear to teach or suggest a media data generator/transmitter which generates and transmits media data <u>used to render the generated multimedia document</u>, as claimed.

Also, the invention as recited in claim 1, generates and transmits a reference clock

value of real-time multimedia broadcasting, generates and transmits a multimedia document

scheduled at the generated reference clock value, and then generates and transmits media

data used to render the generated multimedia document.

However, the supplemental multimedia information 13 of Piotrowski is synchronized

using time codes within the video/TV program 14. See paragraph [0025].

Further, paragraph [0023] of Piotrowski discloses:

> [0023] It is understood that the video/multimedia program
> 14 may be one of many television programs 19 that are
> broadcast or transmitted to the public. The video program
> may be a sitcom, a sports program, a news program, a
> movie, a commercial, a soap opera, a documentary, a car-
> toon, a how-to show, etc. The television program 19 is
> received and displayed by conventional electronic equip-
> ment. The electronic equipment may receive the television
> program 19 through an antenna adapted to receive TV
> signals from a TV broadcast station, from a satellite tran-
> sponder, a trunk cable from a CATV (i.e. cable TV) system,
> or from any other suitable transmission means.

As such, the video/TV program 14 is one of many television programs that are broadcast

or transmitted to the public. That is, **the video/TV program 14 corresponds to the "media**

data" in claim 1. Accordingly, Piotrowski transmits only supplemental multimedia information

synchronized with the video/TV program 14, i.e., media data. In other words, Piotrowski **does**

not generate and separately transmit a clock value for any information or data.

Furthermore, the video/TV program 14 is one-way broadcasting because it is one of

many television programs broadcast or transmitted to the public. The supplemental multimedia

information 13 is **one-way broadcasting** because it is only supplemental information

subordinate to video/TV program 14.

However, the claimed invention realizes two-way broadcasting, i.e., interactive

broadcasting by generating and transmitting a reference clock value of real-time multimedia

broadcasting, and then generating and transmitting a multimedia document scheduled at the

generated reference clock value and then generating and transmitting media data used to

render the generated multimedia document.

Therefore, Piotrowski does not disclose or teach "… generates and transmits a reference

clock value … of real-time multimedia broadcasting … ; … generates and transmits a

multimedia document scheduled at the generated reference clock value; and … generates and

transmits media data used to render the generated multimedia document …," as recited in

claim 1.

Further, Blackketter and Eng do not cure the deficiencies of Piotrowski.

On page 4 of the Office Action, the Examiner states that Piotrowski does not clearly

teach that the reference clock value is a current time value of real-time multimedia broadcasting

at the transmission and reception locations, and cites Blackketter to cure the deficiency. The

Examiner asserts that Blackketter, column 5, lines 5-40, teaches a reference clock

generator/transmitter since Blackketter discloses that the current date and time can be

broadcasted to the receiver unit.

Blackketter discloses an interactive television trigger which has a time attribute value

which indicates a future time when the trigger is to be executed. See abstract. A receiver unit

determines the future time from the time attribute and waits until the indicated future time. At

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the indicated future time, the receiver unit executes the trigger. See column 4, lines 56-60. The

trigger can indicate a year, a month and a day. A time attribute value "T" indicates a wall-clock

date and time. See column 5, lines 7-20. The received unit maintains an indication of the

current date and time. See column 5, lines 22-30.

Blackketter discloses broadcasting the current date and time to the receiver so that the

receiver, such as a WebTV® can maintain a current date and time. Assuming *arguendo*,

Blackketter teaches a reference clock generator/transmitter, there is no teaching or suggestion of

generating and transmitting a multimedia document scheduled at the generated reference clock

value.

On page 5 of the Office Action, the Examiner asserts that Eng, column 17, lines 22-46,

discloses a synchronizer which maintains a system clock and periodically broadcasts time stamps

to subscriber stations in order to main synchronization. Eng discloses an upstream synchronizer

maintaining a system clock and periodically broadcasting time stamps of the system clock so that

all station system clocks and the head end system clock are synchronized. Eng does not teach

the claimed elements. Further, Eng does not cure the deficiencies of Piotrowski and Blackketter.

For at least the above reasons, claim 1 and its dependent claims should be deemed

allowable.

To the extent independent claims 6, 16, 17, 22, 32 and 33 recite similar subject matter,

independent claims 6, 16, 17, 22, 32 and 33 and their dependent claims should be deemed

allowable for at least the same reasons.

III.   Rejection of claims 4, 9, 20, 25, 33, 34, and 35 under 35 USC § 103

Claims 4, 9, 20, 25, 33, 34, and 35 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Piotrowski in view of Blackketter and in view of Eng and further in view of

the Real-Time Streaming Protocol Specification (RFC 2326).

Claims 4, 9, 20, 25, 33, 34, and 35 should be deemed allowable by virtue of their

dependency to claims 1, 6, 17, 22 and 32 for at least the reasons set forth above. Moreover, RFC

2326 does not cure the deficiencies of Piotrowski, Blackketter and Eng.

To the extent independent claim 33 recites subject matter similar to claim 1, independent

claim 33 and its dependent claims should be deemed allowable for at least the same reasons.

IV.   Conclusion

In view of the above, reconsideration and allowance of this application are now believed

to be in order, and such actions are hereby solicited. If any points remain in issue which the

Examiner feels may be best resolved through a personal or telephone interview, the Examiner is

kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue

Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any

overpayments to said Deposit Account.

Respectfully submitted,

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